UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,614	11/29/2001	Eva Kluge	CRR0002	2915

7590 02/22/2005	EXAMINER
KENNETH J. SHEEHAN, BAKER & HOSTETLER LLP	PHAM, THOMAS K

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WASHINGTON SQUARE, SUITE 1100	ART UNIT PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/002,614	KLUGE ET AL.
	Examiner	Art Unit	
	Thomas K Pham	2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 November 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-25</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Response to Amendment

1.   This action is in response to request for re-consideration filed on 11/29/2004.

2.   Applicant's arguments with respect to claims 1-25 have been considered but are moot in

view of the new ground(s) of rejection.

Quotations of U.S. Code Title 35

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claim Rejections - 35 USC § 102

7.　　　Claims 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent

No. 6,438,535 ("Benjamin").

Regarding claim 23

Benjamin teaches a method for displaying a product manual for a particular product, the product

comprising a plurality of components and sub-components, in an interactive graphical user

interface, the method comprising the acts of:

- gathering resources related to the product and its components and sub-components, the

   information including information of types selected from the group consisting essentially

   of documentation, ordering information, graphical display information, functionality,

   actions, error states and animation (col. 2 line 67 to col. 3 line 8, "The lookup tables

   contain ... configuration parameters and interfaces");

- organizing the information into sets of information related to particular components and

   sub-components within the particular product (col. 2 lines 60-65, "The relational database

   contains ... unique to the particular assembly");

- defining a unit object data structure to hold data for related to a particular component

   irrespective of the data type (col. 19 lines 52-62, "The unit definition process ... in the

   part definition"); and

- using data from the unit data structure of an initial component to generate a graphical

   user interface corresponding to the unit data structure and presenting user-selectable links

   to sub-component unit data structures (col. 16 lines 32-30, "The process for manipulating

   data ... driven graphical user interface").

Regarding claim 24

Benjamin teaches the act of using the first instance to instantiate subsequent instances of the unit

object class for selected sub-components (col. 20 lines 58-62, "The unit interconnection ...

opposite gender and are unconnected").

8.   Claim 25 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No.

6,453,687 ("Sharood").

Regarding claim 25

Sharood teaches an appliance (title) comprising:

- a plurality of subsystems cooperating to cause the appliance to perform one or more

  functions (col. 7 lines 32-39, "The appliance communication module ... installed with

  any appliance" [the subsystems such as the appliance communication module and the

  retrofit plug are working to control, monitor and diagnose the appliance]);

- an electronic control system including a data processor and memory capable of executing

  program instructions to control operation of the subsystems (col. 5 lines 18-22, "The

  control server 100 is ... includes a processor 200");

- an interface coupled to the data processor for accessing external data sources (col. 5 lines

  22-28, "The processor 200 is connected ... the primary BC system networks 1-5"); and

- computer code devices executing on the data processor to cause the processor to

  implement a graphical user interface displaying data obtained from the external data

  sources (col. 9 line 56 to col. 10 line 8, "The PLC coded signals ... the user to shut the

  door").

Claim Rejections - 35 USC § 103

9.   Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benjamin in view of U.S. Patent No. 5,864,480 ("Ladd").

Regarding claim 1

Benjamin teaches an electronic product manual comprising: a plurality of data structures holding data representing a product and having a hierarchical relationship as components and sub-components with each other (col. 3 lines 63-65, "A single database may contain ... and assembly definitions" [each table in a relational database represent a data structure]); a graphical user interface (GUI) configured to present data selected from the plurality of data structures to a user in the form of displayed objects, receive input from the user, and enable a user to select data from the plurality of data structures by selecting a displayed object (col. 4 lines 3-5 and col. 16 lines 27-30). Benjamin does not specifically teach a first view of the selected data structure displayed in the GUI upon selection, the first view comprising an image of the selected object; a second view of the selected data structure displayed in the GUI upon selection, the second view including information indicating a hierarchical relationship of the selected data structure with respect to other data structures; and a third view of the selected data structure displayed in the GUI upon selection, the third view including component-specific information. However, Ladd teaches a computer-implemented electronic product development documentation including a first view of a selected data structure displayed in the GUI upon selection, the first view comprising an image of the selected object (col. 4 lines 43-44, "The PDG can open ... clicking on the document icon"); a second view of the selected data structure displayed in the GUI upon selection, the second view including information indicating a hierarchical relationship of the

selected data structure with respect to other data structures (col. 4 lines 58-61, "For browsing purposes, the PDG ... its respective product tree"); and a third view of the selected data structure displayed in the GUI upon selection, the third view including component-specific information (col. 4 lines 61-67, "From here, one of the phase tree ... tool to which it is linked") for the purpose of enabling a user to have immediate access to the integrated information, guidance, advice, assistance, training and other useful information about a product. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the graphical interfaces of Ladd with the product relational database of Benjamin because it would provide for the purpose of enabling a user to have immediate access to the integrated information, guidance, advice, assistance, training and other useful information about a product from the data structures of Benjamin.

Regarding claim 2

Ladd teaches the first, second and third views of the selected data structure are displayed simultaneously (fig. 1 shows the PCC24 displayed simultaneously multiple windows).

Regarding claim 3

Ladd teaches the graphical user interface is configured to enable selection of any displayed object from any of the first, second and third views (col. 4 lines 58-67, "For browsing purposes ... to which it is linked").

Regarding claim 4

Benjamin and Ladd teaches the selected object having user-selectable sub-components but do not teach the first view comprises a three-dimensional image. "Official Notice" is taken for the concept and advantages of having a manual with a three-dimensional image component display

is well known and expected in the art. U.S. Patent No. 5,794,257 by Liu et al. teaches this well

known aspect by showing complex pieces of equipment in 3D with a Computer Aided Design

(CAD) model (col. 5 lines 56-62).

Regarding claim 5

Ladd teaches the first view further comprises help information obtained from the selected data

structure associated with a particular displayed object and made visible in the first view when

user input indicates a focus on the particular displayed object (col. 9 lines 10-14, "In the PDG 30

... and a Help Program 32").

Regarding claim 6

Ladd teaches the second view comprises a tree structure depicting the hierarchical relationship

(col. 6 lines 50-63, "A life cycle tree, as defined ... tree can be created").

Regarding claims 7 and 14

Benjamin and Ladd do not teach the third view presents ordering information relevant to the

selected object. "Official Notice" is taken for the concept and advantages of having a view

presents ordering information relevant to the selected object is well known and expected in the

art. U.S. Patent No. 5,504,674 by Chen et al. teaches the well known feature in form of an

electronic insurance estimating manual which including a part ordering information for the

damage (col. 5 lines 46-53, "The communications network ... to the repair terminals").

Regarding claims 9 and 15

Benjamin and Ladd do not teach at least one of the plurality of data structures includes a pointer

to an external data store having current information. "Official Notice" is taken for the concept

and advantages of having a view presents ordering information relevant to the selected object is

well known and expected in the art. U.S. Patent No. 5,794,257 by Lui et al. teaches this well known feature by using hyperlink for directing (pointing) user to an external data store for current information of a manual on a part (see abstract).

Regarding claim 8

Ladd does not teach each of the plurality of data structures includes data types relevant to the first, second and third views. However, it is inherent for the multiple views to includes data types relevant with each other since they are related and associated with one another.

Regarding claim 10

Ladd teaches a selection tool operable to receive user input and indicate a user-selected object from the plurality of displayed objects in one of the first, second, and third views (col. 4 lines 10-15, "The PSG is used ... release of the products"); wherein the GUI for updating the first, second, and third views in response to the user's selection of an object (col. 3 lines 26-32, "The PCC 24 is modifiable ... milestones, and tools").

Regarding claims 11 and 22

Ladd teaches each of the plurality of data structures defines a default perspective and the act of updating the first, second and third views comprises presenting the default perspectives (col. 2 11-19, "The PCC includes a graphical ... quality management process").

Regarding claim 12

Benjamin teaches a display object for a product manual having a graphical user interface, the display object corresponding to a real-world component of a system, the display object comprising: a link to a unit data structure (fig. 1-3 shows the linking relationship between tables or data structures). Benjamin does not specifically teach first presentation means initiated in

response to selection of the displayed object and operable to retrieve an image of the display

object from the unit data structure and display the image using the graphical user interface;

second presentation means initiated in response to selection of the displayed object and operable

to retrieve a hierarchical view from the unit data structure and display the hierarchical view using

the graphical user interface; and third presentation means initiated in response to selection of the

displayed object and operable to retrieve a information about the real-world component from the

unit data structure and display the information using the graphical user interface. However, Ladd

teaches first presentation means initiated in response to selection of the displayed object and

operable to retrieve an image of the display object from a unit data structure and display the

image using the graphical user interface (col. 4 lines 43-44, "The PDG can open ... clicking on

the document icon"); second presentation means initiated in response to selection of the

displayed object and operable to retrieve a hierarchical view from the unit data structure and

display the hierarchical view using the graphical user interface (col. 4 lines 58-61, "For browsing

purposes, the PDG ... its respective product tree"); and third presentation means initiated in

response to selection of the displayed object and operable to retrieve a information about the

real-world component from the unit data structure and display the information using the

graphical user interface (col. 4 lines 61-67, "From here, one of the phase tree ... tool to which it

is linked") for the purpose of enabling a user to have immediate access to the integrated

information, guidance, advice, assistance, training and other useful information about a product.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the graphical interfaces of Ladd with the product relational database of

Benjamin because it would provide for the purpose of enabling a user to have immediate access

to the integrated information, guidance, advice, assistance, training and other useful information about a product from the data structures of Benjamin.

Regarding claim 13

Ladd teaches selection means operable to retrieve selected data from the unit data structure in response to user input indicated selection of the displayed object (col. 2 lines 27-36, "The system accepts a … release and support").

Regarding claim 16

Ladd teaches functionality means for accessing a description of functionality of the real-world component from the unit data structure (col. 5 lines 6-10, "The Functional Description … assist in concept description").

Regarding claim 17

Ladd teaches actions means for accessing a description of actions that are possible to perform on the real-world component from the unit data structure (col. 5 lines 6-10, "The Functional Description … assist in concept description").

Regarding claim 18

Ladd teaches error state means for accessing a description of potential error states for the real-world object from the unit data structure (col. 8 lines 17-37, "The product description … step to be undertaken").

Regarding claims 19 and 20

Benjamin and Ladd do not teach animation means coupled to communicate with the actions means for retrieving animation sequence data from the unit data structure and generating an animation depicting the actions on the graphical user interface. "Official Notice" is taken for the

concept and advantages of having animation in an electronic manual to depict the actions on a

graphical user interface is well known and expected in the art. U.S. Patent No. 6,567,079 by

Smailagic et al. specifically teaches this well known feature by displaying maintenance

information using animation to identify the components (col. 6 lines 27-33, "Maintenance – As

systems ... to replace them").

Regarding claim 21

Ladd teaches data structures within the unit data structure for indicating relationships between

the display object and other, external display objects, wherein the relationships mirror

relationships between real-world components (col. 6 lines 50-63, "A life cycle tree ... tree can be

created").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.
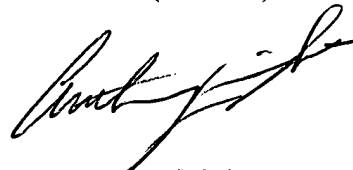
Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.** Responses may also be faxed to the **official fax number (703) 872- 9306.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham
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TP

February 15, 2005

Anthony Knight
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